CLAIMS:

1. A compressor, comprising:

a first member having a first sliding surface; and

a second member having a second sliding surface, wherein one of the sliding surfaces slides on the other sliding surface, and wherein a sliding film made of a binder resin is formed on at least one of the first sliding surface and the second sliding surface, the binder resin containing at least solid lubricant and inorganic particles.

2. The compressor according to claim 1, wherein the sliding film contains a coupling agent.

3. The compressor according to claim 1, wherein the binder resin is polyamide-imide.

4. The compressor according to claim 1, wherein the inorganic particles are of titanium oxide powder.

5. The compressor according to claim 4, wherein the average primary particle diameter of the titanium oxide powder is 1 μm or less.

6. The compressor according to claim 4, wherein, in the sliding film, the content of the titanium oxide powder relative to the binder resin is in the range between 5% by mass and 35% by mass, inclusive.

7. The compressor according to claim 4, wherein, in the sliding film, the content of the titanium oxide powder relative to the binder resin is in the range between 10% by mass and 20% by mass, inclusive.

8. The compressor according to claim 1, further

comprising:

a housing in which a suction chamber, a discharge chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a piston accommodated in the cylinder bore, wherein the piston reciprocates in the cylinder bore and defines a compression chamber in the cylinder bore; and

a swash plate, wherein the swash plate is engaged with the piston via shoes such that rotation of the drive shaft is converted into reciprocation of the piston,

wherein the first member includes the shoes, and wherein the second member includes at least one of the piston and the swash plate.

9. The compressor according to claim 1, further comprising:

a housing in which a suction chamber, a discharge chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a piston accommodated in the cylinder bore, wherein the piston reciprocates in the cylinder bore and defines a compression chamber in the cylinder bore; and

a swash plate, wherein the swash plate is engaged with the piston via shoes such that rotation of the drive shaft is converted into reciprocation of the piston,

wherein the first member includes the housing, and wherein the second member includes at least one of the drive shaft and the piston.

10. The compressor according to claim 1, further comprising:

a housing in which a suction chamber, a discharge chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a piston accommodated in the cylinder bore, wherein the piston reciprocates in the cylinder bore and defines a compression chamber in the cylinder bore; and

a swash plate, wherein the swash plate is engaged with the piston via shoes such that rotation of the drive shaft is converted into reciprocation of the piston,

wherein the first member includes the piston, and wherein the second member includes the swash plate.

11. The compressor according to claim 1, further comprising:

a housing in which a suction chamber, a discharge chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a swash plate that rotates integrally with the drive shaft;

a piston accommodated in the cylinder bore, wherein the piston defines a compression chamber in the cylinder bore, wherein the piston is engaged with the drive shaft via shoes, and wherein the piston reciprocates in the cylinder bore in accordance with an inclination angle of the swash plate; and

a rotary valve rotatably supported by the housing, wherein the rotary valve rotates integrally with the drive shaft, and wherein the compression chamber is connected with the suction chamber through the rotary valve,

wherein the first member includes the housing, and wherein the second member includes the rotary valve.

12. A compressor, comprising:

a first member having a first sliding surface; and

a second member having a second sliding surface, wherein one of the sliding surfaces slides on the other sliding

surface, and wherein a sliding film is formed on at least one of the first sliding surface and the second sliding surface, the sliding film containing polyamide-imide, polytetrafluoroethylene, titanium oxide powder, and a silane coupling agent.

13. The compressor according to claim 12, wherein the average primary particle diameter of the titanium oxide powder is 1 μm or less.

14. The compressor according to claim 12, wherein, in the sliding film, the content of the titanium oxide powder relative to the binder resin is in the range between 5% by mass and 35% by mass, inclusive.

15. The compressor according to claim 12, wherein, in the sliding film, the content of the titanium oxide powder relative to the binder resin is in the range between 10% by mass and 20% by mass, inclusive.

16. The compressor according to claim 12, further comprising:

a housing in which a suction chamber, a discharge chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a piston accommodated in the cylinder bore, wherein the piston reciprocates in the cylinder bore and defines a compression chamber in the cylinder bore; and

a swash plate, wherein the swash plate is engaged with the piston via shoes such that rotation of the drive shaft is converted into reciprocation of the piston,

wherein the first member includes the shoes, and wherein the second member includes at least one of the piston and the swash plate.

17. The compressor according to claim 12, further comprising:

a housing in which a suction chamber, a discharge chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a piston accommodated in the cylinder bore, wherein the piston reciprocates in the cylinder bore and defines a compression chamber in the cylinder bore; and

a swash plate, wherein the swash plate is engaged with the piston via shoes such that rotation of the drive shaft is converted into reciprocation of the piston,

wherein the first member includes the housing, and wherein the second member includes at least one of the drive shaft and the piston.

18. The compressor according to claim 12, further comprising:

a housing in which a suction chamber, a discharge chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a piston accommodated in the cylinder bore, wherein the piston reciprocates in the cylinder bore and defines a compression chamber in the cylinder bore; and

a swash plate, wherein the swash plate is engaged with the piston via shoes such that rotation of the drive shaft is converted into reciprocation of the piston,

wherein the first member includes the piston, and wherein the second member includes the swash plate.

19. The compressor according to claim 12, further comprising:

a housing in which a suction chamber, a discharge

chamber, and a cylinder bore are defined;

a drive shaft, which is rotatably supported by the housing;

a swash plate that rotates integrally with the drive shaft;

a piston accommodated in the cylinder bore, wherein the piston defines a compression chamber in the cylinder bore, wherein the piston is engaged with the drive shaft via shoes, and wherein the piston reciprocates in the cylinder bore in accordance with an inclination angle of the swash plate; and

a rotary valve rotatably supported by the housing, wherein the rotary valve rotates integrally with the drive shaft, and wherein the compression chamber is connected with the suction chamber through the rotary valve,

wherein the first member includes the housing, and wherein the second member includes the rotary valve.